RAW SEQUENCE LISTING

EFS

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/587,193A
Source:	1FWD,
Date Processed by STIC:	3/20/07

ENTERED



IFWO

RAW SEQUENCE LISTING DATE: 03/20/2007 PATENT APPLICATION: US/10/587,193A TIME: 15:01:06

Input Set: N:\efs\03 20 07\10587193A efs\5426JS-6 ST25.txt

Output Set: N:\CRF4\03202007\J587193A.raw

```
3 <110> APPLICANT: Japan Science and Technology Agency
      5 <120> TITLE OF INVENTION: Genetic markers that link to genes associated with Fusarium
head
             blight resistance, and use thereof
      8 <130> FILE REFERENCE: 5426JS-6
     10 <140> CURRENT APPLICATION NUMBER: 10/587,193A
C--> 11 <141> CURRENT FILING DATE: 2006-07-24
    13 <150> PRIOR APPLICATION NUMBER: JP 2004-014839
    14 <151> PRIOR FILING DATE: 2004-01-22
    16 <150> PRIOR APPLICATION NUMBER: JP 2004-270268
                                                           see P.b
    17 <151> PRIOR FILING DATE: 2004-09-16
    19 <160> NUMBER OF SEQ ID NOS: 56
    21 <170> SOFTWARE: PatentIn version 3.4
    23 <210> SEQ ID NO: 1
    24 <211> LENGTH: 20
    25 <212> TYPE: DNA
    26 <213> ORGANISM: Artificial
    28 <220> FEATURE:
    29 <223> OTHER INFORMATION: Artificially Synthesized Primer Sequence
    31 <400> SEQUENCE: 1
    32 agagatecet geteagettg
                                                                               20
    35 <210> SEQ ID NO: 2
    36 <211> LENGTH: 20
    37 <212> TYPE: DNA
    38 <213> ORGANISM: Artificial
    40 <220> FEATURE:
    41 <223> OTHER INFORMATION: Artificially Synthesized Primer Sequence
    43 <400> SEQUENCE: 2
    44 tcgtattaag gccgcatagg
                                                                               20
    47 <210> SEQ ID NO: 3
    48 <211> LENGTH: 20
    49 <212> TYPE: DNA
    50 <213> ORGANISM: Artificial
    52 <220> FEATURE:
    53 <223> OTHER INFORMATION: Artificially Synthesized Primer Sequence
    55 <400> SEQUENCE: 3
    56 gcacgtagcg ttcaacatca
                                                                               20
    59 <210> SEQ ID NO: 4
    60 <211> LENGTH: 20
    61 <212> TYPE: DNA
    62 <213> ORGANISM: Artificial
    64 <220> FEATURE:
    65 <223> OTHER INFORMATION: Artificially Synthesized Primer Sequence
    67 <400> SEQUENCE: 4
```

RAW SEQUENCE LISTING DATE: 03/20/2007
PATENT APPLICATION: US/10/587,193A TIME: 15:01:06

Input Set : N:\efs\03_20_07\10587193A_efs\5426JS-6_ST25.txt

Output Set: N:\CRF4\03202007\J587193A.raw

68 aacttttccc aaccctttcc 20 71 <210> SEQ ID NO: 5 72 <211> LENGTH: 20 73 <212> TYPE: DNA 74 <213> ORGANISM: Artificial 76 <220> FEATURE: 77 <223> OTHER INFORMATION: Artificially Synthesized Primer Sequence 79 <400> SEQUENCE: 5 80 ccgtgtgtcg tctaggtcaa 20 83 <210> SEQ ID NO: 6 84 <211> LENGTH: 20 85 <212> TYPE: DNA 86 <213> ORGANISM: Artificial 88 <220> FEATURE: 89 <223> OTHER INFORMATION: Artificially Synthesized Primer Sequence 91 <400> SEQUENCE: 6 92 caactttggt gggacgtagg 20 95 <210> SEQ ID NO: 7 96 <211> LENGTH: 20 97 <212> TYPE: DNA 98 <213> ORGANISM: Artificial 100 <220> FEATURE: 101 <223> OTHER INFORMATION: Artificially Synthesized Primer Sequence 103 <400> SEQUENCE: 7 104 gttttcgcca tcactcttcc 20 107 <210> SEQ ID NO: 8 108 <211> LENGTH: 208 109 <212> TYPE: DNA 110 <213> ORGANISM: Hordeum vulgare 112 <400> SEQUENCE: 8 113 gcacgtagcg ttcaacatca catctcatct ttggcaaaag aaatggtcaa tcggcacact 60 115 ctcagttttt tgcaccaaaa tgtcccatga gaccaccaac atgtgcttcc cgcaatagta 120 117 gtaaacgaac aaagcaatct agaatgcata gtttgttagc acgaaacagg aaaccatcat 119 gcacataaaa cttttcccaa ccctttcc 208 122 <210> SEQ ID NO: 9 123 <211> LENGTH: 208 124 <212> TYPE: DNA 125 <213> ORGANISM: Hordeum vulgare 127 <400> SEQUENCE: 9 128 gcacgtagcg ttcaacatca catctcatct ttggcaaaag aaatggtcaa tcggcacact 60 130 ctcagttttt tgcaccaaaa tgtcccatga gaccaccaac atgtgcttcc cgcaatagta 120 132 gtaaacgaac aaagctatct agaatgcata gtttgttagc acgaaacagg aaaccatcat 180 134 gcacataaaa cttttcccaa ccctttcc 208 137 <210> SEQ ID NO: 10 138 <211> LENGTH: 335 139 <212> TYPE: DNA 140 <213> ORGANISM: Hordeum vulgare 143 <220> FEATURE: 144 <221> NAME/KEY: misc feature

DATE: 03/20/2007

TIME: 15:01:06

Input Set: N:\efs\03 20 07\10587193A efs\5426JS-6 ST25.txt Output Set: N:\CRF4\03202007\J587193A.raw 145 <222> LOCATION: (228) .. (228) 146 <223> OTHER INFORMATION: n is a, c, g, or t 148 <220> FEATURE: 149 <221> NAME/KEY: misc feature 150 <222> LOCATION: (307)..(307) 151 <223> OTHER INFORMATION: n is a, c, g, or t 153 <400> SEQUENCE: 10 154 ccgtgtgtcg tctaggtcaa ccatgacaac aactacgtgt ggtcgtgact ttggcctgct 60 156 gttgtcacct caccatggat tgtggtctcc atcaaaagtt atttgtgaga gtttcatctc 120 158 tgcagatctg gtggttgact ttggtggcat gatcataact atggacggag tcttgatccg 180 W--> 160 gagggatggt tgtgcgccaa cgaaggtcac attgcatgta attgttcnga tcacggaaga 240 162 gtgatggcga aaacacatga gtgacttcaa tggtggtgtt acttcagtat ccggtatcaa 300 W--> 164 gcttcanggc aaaagcctac gtcccaccaa agttg 335 167 <210> SEQ ID NO: 11 168 <211> LENGTH: 335 169 <212> TYPE: DNA 170 <213> ORGANISM: Hordeum vulgare 173 <220> FEATURE: 174 <221> NAME/KEY: misc feature 175 <222> LOCATION: (228)..(228) 176 <223> OTHER INFORMATION: n is a, c, g, or t 178 <220> FEATURE: 179 <221> NAME/KEY: misc_feature 180 <222> LOCATION: (307)..(307) 181 <223> OTHER INFORMATION: n is a, c, g, or t 183 <400> SEQUENCE: 11 184 ccgtgtgtcg tctaggtcaa ccatgacaac aactacgtgt ggtcgtgact ttggcctgct 60 186 gttgtcacct caccatggat tgtggtctcc atcaaaaqtt atttgtgaga gtttcatctc 120 188 tgcagatctg gtggttgact ttggtggcat gatcataact atggacggag tcttgatccg 180 W--> 190 gagggatggt tgtgcggcaa cgaaggtcac attgcatgta attgttcnga tcacggaaga 240 192 gtgatggcga aaacacatga gtgacttcaa tggtggtgtt acttcagtat ccggtatcaa 300 W--> 194 gcttcanggc aaaagcctac gtcccaccaa agttg 335 197 <210> SEQ ID NO: 12 198 <211> LENGTH: 254 199 <212> TYPE: DNA 200 <213> ORGANISM: Hordeum vulgare 203 <220> FEATURE: 204 <221> NAME/KEY: misc_feature 205 <222> LOCATION: (228)..(228) 206 <223> OTHER INFORMATION: n is a, c, g, or t 208 <400> SEQUENCE: 12 209 ccgtgtgtcg tctaggtcaa ccatgacaac aactacgtgt ggtcgtgact ttggcctgct 60 211 gttgtcacct caccatggat tgtggtctcc atcaaaagtt atttgtgaga gtttcatctc 120 213 tgcagatctg gtggttgact ttggtggcat gatcataact atggacggag tcttgatccg 180 W--> 215 gagggatggt tgtgcgccaa cgaaggtcac attgcatgta attgttcnga tcacggaaga 240 217 gtgatggcga aaac 254 220 <210> SEQ ID NO: 13 221 <211> LENGTH: 254 222 <212> TYPE: DNA

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/587,193A

RAW SEQUENCE LISTING DATE: 03/20/2007
PATENT APPLICATION: US/10/587,193A TIME: 15:01:06

Input Set : N:\efs\03_20_07\10587193A_efs\5426JS-6_ST25.txt

Output Set: N:\CRF4\03202007\J587193A.raw

223 <213> ORGANISM: Hordeum vulgare 226 <220> FEATURE: 227 <221> NAME/KEY: misc_feature 228 <222> LOCATION: (228)..(228) 229 <223> OTHER INFORMATION: n is a, c, g, or t 231 <400> SEQUENCE: 13 232 cogtgtgtog totaggtcaa coatgacaac aactacgtgt ggtcgtgact ttggcctgct 60 234 gttgtcacct caccatggat tgtggtctcc atcaaaagtt atttgtgaga gtttcatctc 120 236 tgcagatctg gtggttgact ttggtggcat gatcataact atggacggag tcttgatccg 180 W--> 238 gagggatggt tgtgcggcaa cgaaggtcac attgcatgta attgttcnga tcacggaaga 240 240 gtgatggcga aaac 254 243 <210> SEQ ID NO: 14 244 <211> LENGTH: 17 245 <212> TYPE: DNA 246 <213> ORGANISM: Artificial 248 <220> FEATURE: 249 <223> OTHER INFORMATION: Artificially Synthesized Primer Sequence 251 <400> SEQUENCE: 14 252 ctcqtaqact qcqtacc 255 <210> SEQ ID NO: 15 256 <211> LENGTH: 18 257 <212> TYPE: DNA 258 <213> ORGANISM: Artificial 260 <220> FEATURE: 261 <223> OTHER INFORMATION: Artificially Synthesized Primer Sequence 263 <400> SEQUENCE: 15 264 aattggtacg cagtctac 18 267 <210> SEQ ID NO: 16 268 <211> LENGTH: 16 269 <212> TYPE: DNA 270 <213> ORGANISM: Artificial 272 <220> FEATURE: 273 <223> OTHER INFORMATION: Artificially Synthesized Primer Sequence 275 <400> SEQUENCE: 16 276 gacgatgagt cctgag 16 . 279 <210> SEQ ID NO: 17 280 <211> LENGTH: 14 281 <212> TYPE: DNA 282 <213> ORGANISM: Artificial 284 <220> FEATURE: 285 <223> OTHER INFORMATION: Artificially Synthesized Primer Sequence 287 <400> SEQUENCE: 17 288 tactcaggac tcat 14 291 <210> SEQ ID NO: 18 292 <211> LENGTH: 16 293 <212> TYPE: DNA 294 <213> ORGANISM: Artificial 296 <220> FEATURE: 297 <223> OTHER INFORMATION: Artificially Synthesized Primer Sequence

RAW SEQUENCE LISTING DATE: 03/20/2007 PATENT APPLICATION: US/10/587,193A TIME: 15:01:06

Input Set : N:\efs\03_20_07\10587193A_efs\5426JS-6_ST25.txt

Output Set: N:\CRF4\03202007\J587193A.raw

299 <400> SEQUENCE: 18 16 300 gactgcgtac caattc 303 <210> SEQ ID NO: 19 304 <211> LENGTH: 16 305 <212> TYPE: DNA 306 <213> ORGANISM: Artificial 308 <220> FEATURE: 309 <223> OTHER INFORMATION: Artificially Synthesized Primer Sequence 311 <400> SEQUENCE: 19 16 312 gatgagtcct gagtaa 315 <210> SEQ ID NO: 20 316 <211> LENGTH: 19 317 <212> TYPE: DNA 318 <213> ORGANISM: Artificial 320 <220> FEATURE: 321 <223> OTHER INFORMATION: Artificially Synthesized Primer Sequence 323 <400> SEQUENCE: 20 19 324 gactgcgtac caattcccg 327 <210> SEQ ID NO: 21 328 <211> LENGTH: 19 329 <212> TYPE: DNA 330 <213> ORGANISM: Artificial 332 <220> FEATURE: 333 <223> OTHER INFORMATION: Artificially Synthesized Primer Sequence 335 <400> SEQUENCE: 21 19 336 gatgagtcct gagtaaacg 339 <210> SEQ ID NO: 22 340 <211> LENGTH: 18 341 <212> TYPE: DNA 342 <213> ORGANISM: Artificial 344 <220> FEATURE: 345 <223> OTHER INFORMATION: Artificially Synthesized Primer Sequence 347 <400> SEQUENCE: 22 18 348 ccgttggaca ggaaggag 351 <210> SEQ ID NO: 23 352 <211> LENGTH: 18 353 <212> TYPE: DNA 354 <213> ORGANISM: Artificial 356 <220> FEATURE: 357 <223> OTHER INFORMATION: Artificially Synthesized Primer Sequence 359 <400> SEQUENCE: 23 18 360 cccatagacc ggactgtt 363 <210> SEQ ID NO: 24 364 <211> LENGTH: 21 365 <212> TYPE: DNA 366 <213> ORGANISM: Artificial 368 <220> FEATURE: 369 <223> OTHER INFORMATION: Artificially Synthesized Primer Sequence 371 <400> SEQUENCE: 24

RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/10/587,193A

DATE: 03/20/2007 TIME: 15:01:07

KyT

Input Set : N:\efs\03_20_07\10587193A_efs\5426JS-6_ST25.txt

Output Set: N:\CRF4\03202007\J587193A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:10; N Pos. 228,307 Seq#:11; N Pos. 228,307 Seq#:12; N Pos. 228 Seq#:13; N Pos. 228 Seq#:48; N Pos. 7,17,29,47,98 Seq#:49; N Pos. 35,37 Seq#:50; N Pos. 19 Seq#:56; N Pos. 41

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,36,37,38,39,40,41,42,43,44,45,46,47

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/587,193A

DATE: 03/20/2007 TIME: 15:01:07

Input Set : N:\efs\03_20_07\10587193A_efs\5426JS-6_ST25.txt

Output Set: N:\CRF4\03202007\J587193A.raw

```
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:160 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:180
L:164 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:300
L:190 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:180
L:194 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:300
L:215 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:180
L:238 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:180
L:683 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0
L:685 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:60
L:711 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:0
L:734 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:0
L:818 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:0
```